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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/773,172	01/31/2001	Mark E. Epstein	6169-212	6092

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Gregory A. Nelson
Akerman Sentrefitt
222 Lakeview Avenue, Fourth Floor
P.O. Box 3188
West Palm Beach, FL 33402-3188

EXAMINER

OPSASNICK, MICHAEL N

ART UNIT	PAPER NUMBER
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2655

DATE MAILED: 03/22/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/773,172

Applicant(s)

EPSTEIN, MARK E.

Examiner

Michael N. Opsasnick

Art Unit

2655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-11 and 19-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-11 and 19-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 8-11,19-24,31-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luc Van Tichelen et al. (U.S. Patent 6,311,159, filed October 5, 1999) in view of Makihata (6278770).

Van Tichelen teaches a speech layer converting DTMF tones into representative text-based codes, inherently first determining one or more prosodic characteristics of said DTMF signal, as well as Automatic Speech Recognition converting speech into text for data input (col. 1, lines 60-67 and col. 3, lines 1-7), as well as "converting, with a natural language understanding module inherently providing contextual feedback, text messages from the speech layer into representative semantic meaning messages" (col. 3, lines 12-16). Luc Van Tichelen *et al.* (U.S. Patent 6,311,159, filed October 5, 1999) does not explicitly teach offering multiple textual equivalents based upon the DTMF input, however, Makihata (6278770) teaches timing between two of the DTMF and determining the type of character it represents (fig. 1, subblock 4; fig. 2b,

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subblocks s23 and s24; and fig 3). Therefore, it would have been obvious to one of ordinary skill in the art of translation of DTMF signals into codes to modify the teachings of Luc Van Tichelen et al. with the timing and grouping of DTMF signals because it would advantageously allow for unnecessary repeating of information (col. 4, lines 20-25; the timing of the DTMF input allows different interpretation of the DTMF input -- col. 4 lines 40-55).

3. Claims 8-11,19-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gerardo Chaves (U.S. Patent 6,510,414, filed October 5, 1999) in view of the combination of Luc Van Tichelen *et al.* in view of Makihata (6278770).

As per claims 8-11,19-34, this being an alternative rejection thereof, Chaves teaches determining whether an audio input signal is a dual tone multi-frequency (DTMF) signal or human speech and converting them to equivalent text, necessarily first determining one or more prosodic characteristics of said DTMF signal (col. 2, lines 32-40 and col. 4, line 66 through col. 5, line 4).

However, Chaves does not teach providing the equivalent text to a natural language understanding (NLU) system to determine its meaning. However, the combination of Van Tichelen in view of Makihata (6278770), in addition to teaching a speech layer converting DTMF tones into representative text-based codes as well as Automatic Speech Recognition for data input (Van Tichelen ,col. 1, lines 60-67 and col. 3, lines 1-7), as well as "converting, with a natural language understanding module, text messages from the speech layer into representative semantic meaning messages", said NLU module necessarily providing contextual feedback (col. 3, lines 12-16)..

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As per claims 25 and 29, Chaves suggests automatically collating the input text from spoken utterances and equivalent text from DTMF input into the appropriate data fields (col. 3, lines 63-67).

Response to Arguments

4. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872 9314,

(for informal or draft communications, please label "PROPOSED" or "DRAFT")

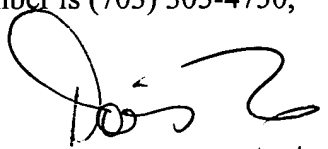
Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Opsasnick, telephone number (703)305-4089, who is available Tuesday-Thursday, 9AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Doris To, can be reached at (703)305-4827. The facsimile phone number for this group is (703)872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 2600 receptionist whose telephone number is (703) 305-4750, the 2600 Customer Service telephone number is (703) 306-0377.

mno
3/11/04


DORIS H. TO 3/17/04
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600